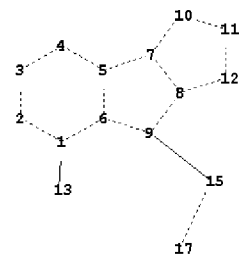
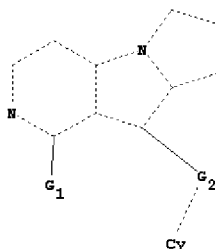


=>

Uploading C:\Program Files\Stnexp\Queries\10532633.str



chain nodes :

13 15 17

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12

chain bonds :

1-13 9-15 15-17

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 7-10 8-9 8-12 10-11 11-12

exact/norm bonds :

1-2 1-6 1-13 2-3 3-4 4-5 5-6 5-7 6-9 7-8 7-10 8-9 8-12 9-15 10-11 11-12 15-17

G1:C,S

G2:O,S

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS

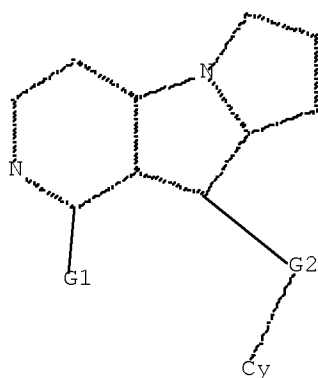
10:CLASS 11:CLASS 12:CLASS 13:CLASS 15:CLASS 17:CLASS

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR



G1 C,S  
G2 O,S

Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 12:05:59 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 194 TO ITERATE

100.0% PROCESSED 194 ITERATIONS 1 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 3045 TO 4715  
PROJECTED ANSWERS: 1 TO 80

L2 1 SEA SSS SAM L1

=> s l1 ful

FULL SEARCH INITIATED 12:06:05 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 4351 TO ITERATE

100.0% PROCESSED 4351 ITERATIONS 18 ANSWERS  
SEARCH TIME: 00.00.01

L3 18 SEA SSS FUL L1

=> file caplus

|                      |                  |               |
|----------------------|------------------|---------------|
| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
| FULL ESTIMATED COST  | 178.36           | 178.57        |

FILE 'CAPLUS' ENTERED AT 12:06:15 ON 15 JUN 2008  
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FILE LAST UPDATED: 13 Jun 2008 (20080613/ED)

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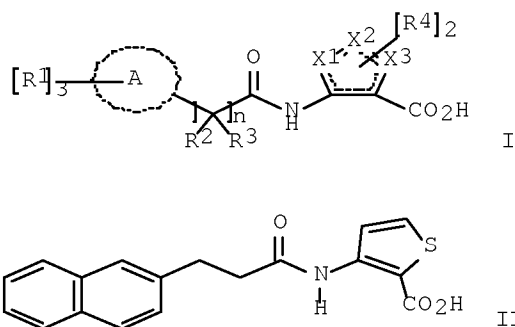
<http://www.cas.org/legal/infopolicy.html>

=> s 13

L4 15 L3

=> d abs fbib hitstr 1-15

L4 ANSWER 1 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN  
GI



AB The title compds. I [one of X<sub>1</sub>-X<sub>3</sub> = S, and the other two represent C or N atoms; ring A = 6-10 membered aryl, 5-13 membered heteroaryl or partially aromatic heterocyclyl; R<sub>1</sub> = H, halo, OH, CO<sub>2</sub>H, etc.; R<sub>2</sub>, R<sub>3</sub> = H, alkyl, haloalkyl, etc.; n = 2-4; R<sub>4</sub> = H, halo, S(alkyl), CN, etc.], that are useful for treating atherosclerosis, dyslipidemias and the like, were prepared and disclosed. E.g., a multi-step synthesis of II, starting from 3-(2-naphthyl)acrylic acid, was given. Compds. I generally have an IC<sub>50</sub> in the 3H-nicotinic acid competition binding assay within the range of 1 nM to about 25 μM. Also compds. I generally have an EC<sub>50</sub> in the functional in vitro GTPγS binding assay within the range of about less than 1 μM to as high as about 100 μM. Pharmaceutical compns. comprising the compound I alone or in combination with DP receptor antagonist, are also included.

AN 2007:1204726 CAPLUS Full-text

DN 147:486319

TI Preparation of N-(2-carboxythienyl) amides as niacin receptor agonists

IN Colletti, Steven L.; Tata, James R.; Chen, Weichun; Beresis, Richard T.; Ding, Fa-Xiang; Schmidt, Darby Rye; Shen, Hong; Raghavan, Subharekha

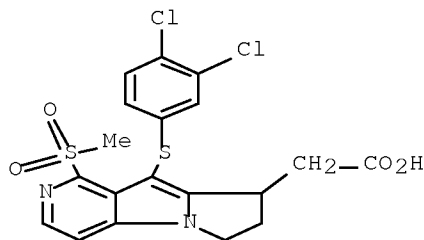
PA Merck & Co., Inc., USA

SO PCT Int. Appl., 58pp.

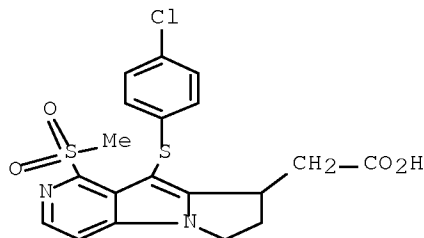
CODEN: PIXXD2

DT Patent  
LA English  
FAN.CNT 1

|    | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE       |
|----|---|------|----------|-----------------|------------|
| PI | WO 2007120575   | A2   | 20071025 | WO 2007-US8584  | 20070406   |
|    | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW |      |          |                 |            |
|    | RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  |      |          |                 |            |
|    |   |      |          | US 2006-791019P | P 20060411 |
| OS | MARPAT 147:486319   |      |          |                 |            |
| IT | 688356-96-9 688357-16-6 688357-17-7   |      |          |                 |            |
|    | RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (co-drug; preparation of N-(2-carboxythienyl) amides as niacin receptor agonists)   |      |          |                 |            |
| RN | 688356-96-9 CAPLUS  |      |          |                 |            |
| CN | 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(methylsulfonyl)- (CA INDEX NAME)   |      |          |                 |            |

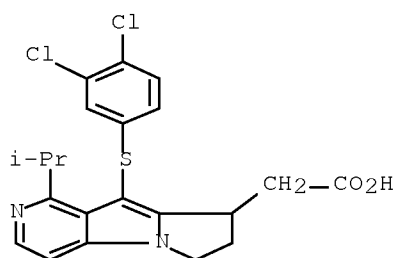


RN 688357-16-6 CAPLUS  
CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(4-chlorophenyl)thio]-7,8-dihydro-1-(methylsulfonyl)- (CA INDEX NAME)



RN 688357-17-7 CAPLUS  
CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-

7,8-dihydro-1-(1-methylethyl)- (CA INDEX NAME)



L4 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. I [X = C or N; Z = (un)substituted aryl or heteroaryl; R1 independently = H, halo, CO<sub>2</sub>H, CN, etc.; R2 and R3 independently = H, alkyl, haloalkyl, alkoxy, etc.; R4 = H, F, or (un)substituted alkyl; R5 = CO<sub>2</sub>H, tetrazole, or CONHSO<sub>2</sub>R<sub>6</sub> wherein R<sub>6</sub> = (un)substituted alkyl or phenyl; m and p = 1 or 2 such that their sum = 3; n = 2-4; A = 6-10 membered ], as well as their pharmaceutically acceptable salts are prepared and disclosed as useful for treating atherosclerosis, dyslipidemias and the like. Thus, e.g., II was prepared by conversion of 3-(4-bromophenyl)propionic acid to the amide with N-hydroxysuccinimide followed by reaction with triflate III to form the 4-bromophenylpropionamide derivative which was coupled with 4-hydroxyphenylboronic acid and hydrolyzed to give the desired product. In the 3H-nicotinic acid competition binding assay, I demonstrated IC<sub>50</sub> values ranging from 1 nM to about 25 μM. Pharmaceutical compns. and methods of use are also included.

AN 2007:912171 CAPLUS Full-text

DN 147:277179

TI Preparation of carboxamidocyclohexenylcarboxylic acids derivatives as niacin receptor agonists, compositions containing such compounds and methods of treatment

IN Raghavan, Subharekha; Schmidt, Darby Rye; Colletti, Steven L.; Smenton, Abigail Lee

PA Merck & Co., Inc., USA

SO PCT Int. Appl., 96pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

|    | PATENT NO.    | KIND  | DATE     | APPLICATION NO. | DATE     |
|----|---------------|---|----------|-----------------|----------|
|    | -----         | ----  | -----    | -----           | -----    |
| PI | WO 2007092364 | A2  | 20070816 | WO 2007-US2994  | 20070202 |
|    | W:            | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, |          |                 |          |

TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW  
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,  
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,  
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM

US 2006-765853P P 20060207

OS MARPAT 147:277179

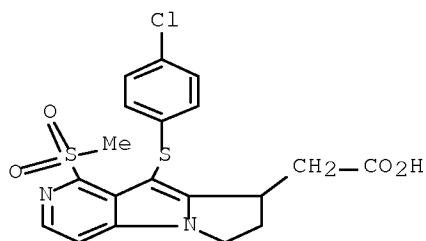
IT 688357-16-6 688357-17-7

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)

(claimed co-drugs for administration; preparation of cyclohexylcarboxylates  
 as niacin receptor agonists)

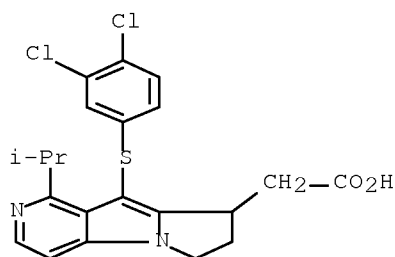
RN 688357-16-6 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(4-chlorophenyl)thio]-7,8-  
 dihydro-1-(methylsulfonyl)- (CA INDEX NAME)

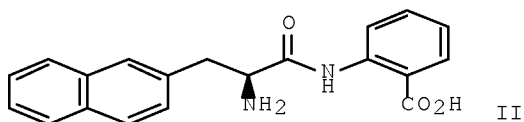
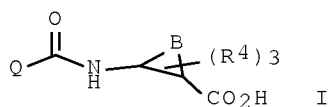


RN 688357-17-7 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-  
 7,8-dihydro-1-(1-methylethyl)- (CA INDEX NAME)



L4 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN  
 GI



AB Title compds. [I; Q = (R1)3A[C(Ra)2]xCRb(NR2R3)(CHRC)y; A = aryl, heteroaryl; B = atoms to form Ph, thienyl, cyclohexenyl ring; R1 = H, halo, OH, CO2H, cyano, NH2, CORE, aminoalkyl, CONH2, (substituted) Ph, heteroaryl, etc.; Re = (substituted) alkyl, Ph; Ra, Rb, RC = H, alkyl, haloalkyl; R2, R3 = H, alkyl, haloalkyl; R4 = H, halo, (substituted) alkyl, aryl, heteroaryl, heterocyclyl, etc.; 1 of x, y = 0, the other = 1], were prepared Thus, N-(tert-butoxycarbonyl)-3-(2-naphthyl)-L-alanine in CH2Cl2 at -10° was treated with DCC, HOBT, and Et 2-aminobenzoate followed by stirring for 12-24 h to give a residue which was treated with KOH in THF/MeOH/H2O and then with CF3CO2H in CH2Cl2 to give title compound (II). I in the functional in vitro GTPγS binding assay showed EC50 values of about 1-100 μM.

AN 2007:728973 CAPLUS Full-text

DN 147:143658

TI Preparation of (hetero)aryl amino acid amides as niacin receptor agonists for treatment of atherosclerosis, dyslipidemia, diabetes, and metabolic syndrome.

IN Imbriglio, Jason; Colletti, Steven L.; Tata, James R.; Beresis, Richard T.; Marley, Daria; Raghavan, Subharekha; Schmidt, Darby Rye; Lins, Ashley Rouse; Smenton, Abigail L.; Chen, Weichun; Shen, Hong; Ding, Fa-Xiang; Bodner, Rena

PA Merck & Co., Inc., USA

SO PCT Int. Appl., 78pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

|    | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE       |
|----|---|------|----------|-----------------|------------|
|    | -----   | ---- | -----    | -----           | -----      |
| PI | WO 2007075749   | A2   | 20070705 | WO 2006-US48535 | 20061220   |
|    | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW |      |          |                 |            |
|    | RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  |      |          |                 |            |
|    |   |      |          | US 2005-751877P | P 20051220 |

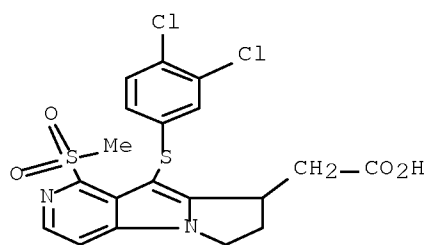
OS MARPAT 147:143658

IT 688356-96-9 688357-16-6 688357-17-7

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(coadministration; preparation of (hetero)aryl amino acid amides as niacin receptor agonists for treatment of atherosclerosis, dyslipidemia, diabetes, and metabolic syndrome)

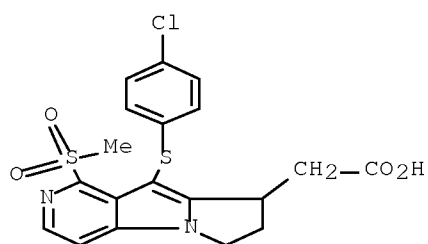
RN 688356-96-9 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(methylsulfonyl)- (CA INDEX NAME)



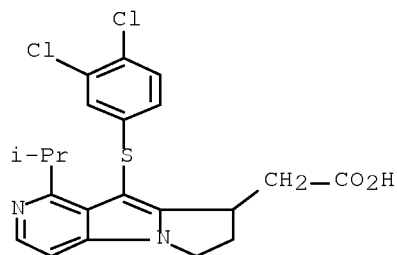
RN 688357-16-6 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(4-chlorophenyl)thio]-7,8-dihydro-1-(methylsulfonyl)- (CA INDEX NAME)

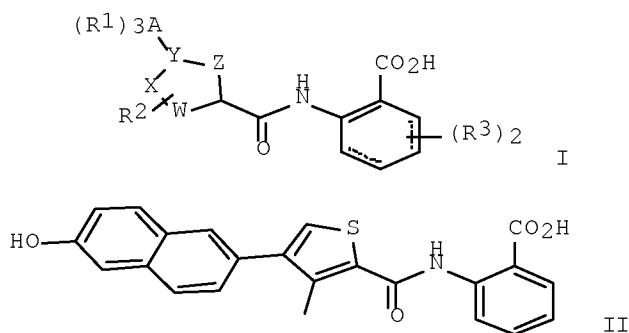


RN 688357-17-7 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(1-methylethyl)- (CA INDEX NAME)



L4 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN  
GI



AB Title compds. [I; 1-3 of W, X, Z = heteroatoms, the other = C; Y = C, N; 0-1 of W, X, Z = O, S, the remainder of W, X, Z = C, N; ring containing W, X, Y, Z is aromatic; A = 9-10 membered aryl, 8-10 membered heteroaryl, partially aromatic heterocyclyl; R1 = H, OH, halo, cyano, (substituted) alkyl, alkenyl, alkynyl, etc.; R2 = H, (substituted) alkyl, alkenyl; R3 = H, halo, Me, halomethyl; dotted lines = optional double bonds, either both present or both absent], were prepared Thus, title compound (II) was prepared from 4-bromo-3-methylthiophene-2-carboxylic acid, 6-hydroxy-2-naphthylboronic acid, and anthranilic acid. In a 3H-nicotinic acid competition binding assay, I showed IC50's of about 10 nM-25  $\mu$ M.

AN 2007:351935 CAPLUS [Full-text](#)

DN 146:379811

TI Preparation of heterocyclylcarbonylaminobenzoic acids as niacin receptor agonists

IN Colletti, Steven L.; Imbriglio, Jason E.; Beresis, Richard Thomas; Frie, Jessica Leslie

PA Merck & Co., Inc., USA

SO PCT Int. Appl., 54pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

|    | PATENT NO.    | KIND   | DATE     | APPLICATION NO. | DATE       |
|----|---------------|--|----------|-----------------|------------|
| PI | WO 2007035478 | A2   | 20070329 | WO 2006-US36023 | 20060915   |
|    | WO 2007035478 | A3   | 20071122 |                 |            |
|    | W:            | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW |          |                 |            |
|    | RW:           | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA   |          |                 |            |
|    | AU 2006292559 | A1   | 20070329 | US 2005-718622P | P 20050920 |
|    |               |  |          | AU 2006-292559  | 20060915   |
|    |               |  |          | US 2005-718622P | P 20050920 |
|    |               |  |          | WO 2006-US36023 | W 20060915 |

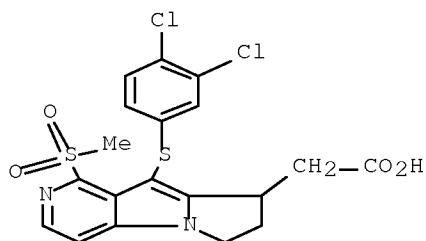
OS MARPAT 146:379811

IT 688356-96-9 688357-16-6 688357-17-7

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(coadministration; preparation of heterocyclylcarbonylaminobenzoic acids as  
niacin receptor agonists)

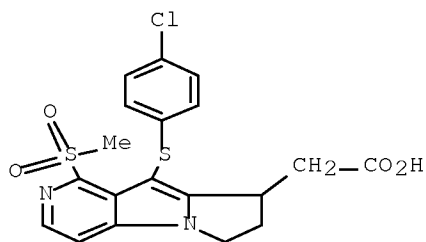
RN 688356-96-9 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-  
7,8-dihydro-1-(methylsulfonyl)- (CA INDEX NAME)



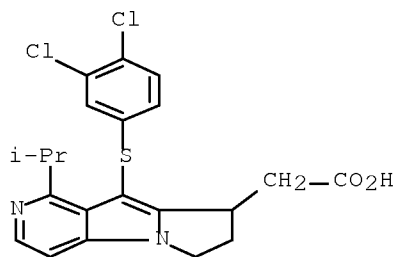
RN 688357-16-6 CAPLUS

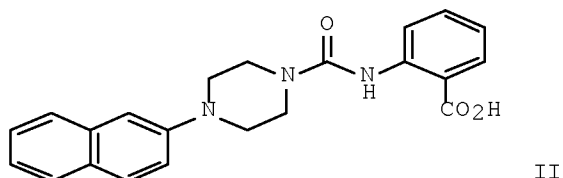
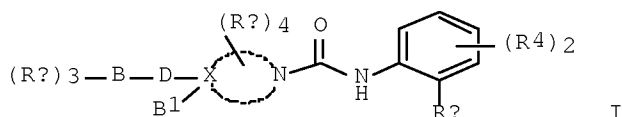
CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(4-chlorophenyl)thio]-7,8-  
dihydro-1-(methylsulfonyl)- (CA INDEX NAME)



RN 688357-17-7 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-  
7,8-dihydro-1-(1-methylethyl)- (CA INDEX NAME)





AB Title compds. I [wherein X = C or N; D = bond, O, CH<sub>2</sub>, CH<sub>2</sub>CH<sub>2</sub> or CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>; B = (hetero)aryl; B' = H or absent; B and B' can be taken together to form a spiro ring while D = bond; Ra = H, halo, OH, etc.; Rb = H, halo, alkyl, etc.; Rc = COOH or tetrazol-5-yl; R4 = H, halo or (halo)methyl, with limitations] or pharmaceutically acceptable salts and solvates were prepared as niacin receptor agonists. Solid-phase synthesis of I such as II on Wang resin was disclosed. The invented compds. generally have EC<sub>50</sub> in the range of 1 μM to 100 μM for niacin receptor in the binding assay. I are useful for the treatment of atherosclerosis, dyslipidemia, diabetes and other conditions.

AN 2007:259556 CAPLUS Full-text

DN 146:316951

TI Preparation of piperazinecarboxamides, diazepanecarboxamides and their analogs as niacin receptor agonists for the treatment of atherosclerosis, dyslipidemia and diabetes

IN Colletti, Steven L.; Shen, Hong; Tata, James R.; Szymonifka, Michael J.

PA Merck & Co., Inc., USA

SO PCT Int. Appl., 55pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

|    | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE       |
|----|---|------|----------|-----------------|------------|
| PI | WO 2007027532   | A2   | 20070308 | WO 2006-US33304 | 20060825   |
|    | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW |      |          |                 |            |
|    | RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  |      |          |                 |            |
|    | AU 2006285064   | A1   | 20070308 | US 2005-712275P | P 20050829 |
|    |   |      |          | AU 2006-285064  | 20060825   |
|    |   |      |          | US 2005-712275P | P 20050829 |
|    |   |      |          | WO 2006-US33304 | W 20060825 |
| CA | 2620570   | A1   | 20070308 | CA 2006-2620570 | 20060825   |
|    |   |      |          | US 2005-712275P | P 20050829 |
|    |   |      |          | WO 2006-US33304 | W 20060825 |

OS MARPAT 146:316951

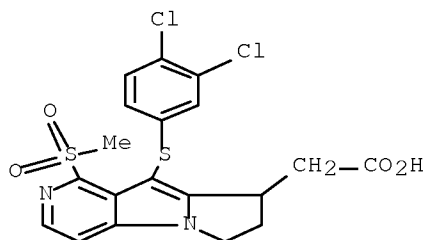
IT 688356-96-9 688357-16-6 688357-17-7

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(co-drug; preparation of piperazinecarboxamides, diazepamcarboxamides and their analogs as niacin receptor agonists for treatment of atherosclerosis, dyslipidemia and diabetes)

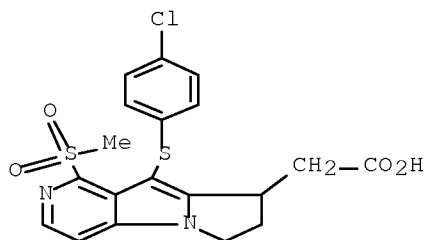
RN 688356-96-9 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(methylsulfonyl)- (CA INDEX NAME)



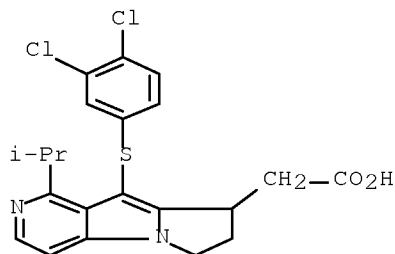
RN 688357-16-6 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(4-chlorophenyl)thio]-7,8-dihydro-1-(methylsulfonyl)- (CA INDEX NAME)



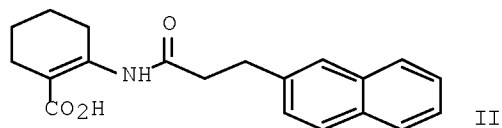
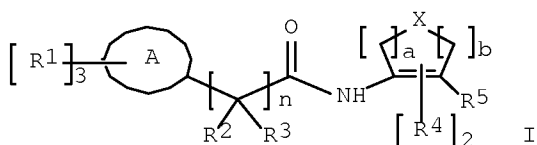
RN 688357-17-7 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(1-methylethyl)- (CA INDEX NAME)



L4 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN

GI



AB Title compds. I [X = CH<sub>2</sub>, O, S, etc.; a, b = 1-3 such as a + b = 2-4; ring A = aryl, heteroaryl, partially aromatic heterocyclic group, said heteroaryl and partially aromatic heterocyclic group containing at least one heteroatom selected from O, S, SO, etc., and optionally containing 1 other heteroatom selected from O and S, and optionally containing 1-3 addnl. N atoms, with up to 5 heteroatoms being present; R<sub>2</sub>, R<sub>3</sub> = H, alkyl, haloalkyl, etc.; n = 1-5; R<sub>4</sub> = H, halo, R<sub>6</sub>; R<sub>6</sub> = alkyl optionally substituted with 1-3 groups, 0-3 of which are halo, and 0-1 of which are selected from the group consisting of O-alkyl, hydroxy, amino, etc.; R<sub>5</sub> = -CO<sub>2</sub>H, tetrazol-5-yl, etc.; R<sub>1</sub> = H, halo, hydroxy, etc.], pharmaceutically acceptable salts or solvates thereof were prepared For example, reaction of 3-(naphthalen-2-yl)propionic acid with methanesulfonyl chloride followed by in-situ treatment with Me 2-aminocyclohex-2-ene-1-carboxylate and hydrolysis using NaOH afforded compound II. The invented compds. generally have an IC<sub>50</sub> in the 3H-nicotinic acid competition binding assays within the range of 1 nM to about 25 μM, and have an EC<sub>50</sub> in the functional in vitro GTPγS binding assays within the range of about 1-100 μM.

AN 2006:1356948 CAPLUS Full-text

DN 146:100362

TI Preparation of 2-acylaminocycloalkenecarboxylic acids derivatives as niacin receptor agonists

IN Raghavan, Subharekha; Colletti, Steven L.; Ding, Fa-Xiang; Shen, Hong; Tata, James R.; Lins, Ashley Rouse; Smenton, Abigail Lee; Chen, Weichun; Schmidt, Darby Rye; Tria, George Scott

PA USA

SO U.S. Pat. Appl. Publ., 69pp.  
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

|    | PATENT NO.     | KIND | DATE     | APPLICATION NO.  | DATE       |
|----|----------------|------|----------|--|------------|
| PI | US 20060293364 | A1   | 20061228 | US 2006-474646   | 20060626   |
|    |                |      |          | US 2005-694711P  | P 20050628 |
|    | AU 2006261839  | A1   | 20070104 | AU 2006-261839   | 20060626   |
|    |                |      |          | US 2005-694711P  | P 20050628 |
|    |                |      |          | WO 2006-US24740  | W 20060626 |
|    | CA 2611552     | A1   | 20070104 | CA 2006-2611552  | 20060626   |
|    |                |      |          | US 2005-694711P  | P 20050628 |
|    |                |      |          | WO 2006-US24740  | W 20060626 |
|    | WO 2007002557  | A1   | 20070104 | WO 2006-US24740  | 20060626   |
|    |                |      |          |  |            |
|    |                |      |          | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, |            |

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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

EP 1901731 A1 20080326 US 2005-694711P P 20050628  
 EP 2006-785553 20060626  
 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, HR  
 US 2005-694711P P 20050628  
 WO 2006-US24740 W 20060626  
 KR 2008019653 A 20080304 KR 2007-730918 20071228  
 US 2005-694711P P 20050628  
 WO 2006-US24740 W 20060626

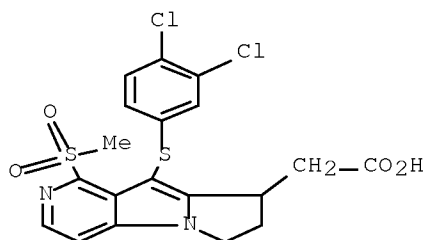
OS MARPAT 146:100362

IT 688356-96-9 688357-16-6 688357-17-7

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (medicaments with; preparation of 2-acylaminocycloalkenecarboxylic acids as niacin receptor agonists)

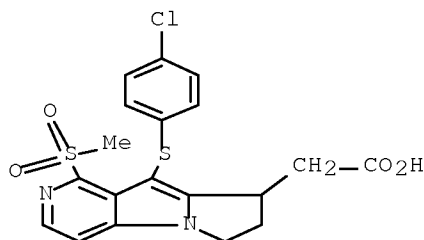
RN 688356-96-9 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(methylsulfonyl)- (CA INDEX NAME)



RN 688357-16-6 CAPLUS

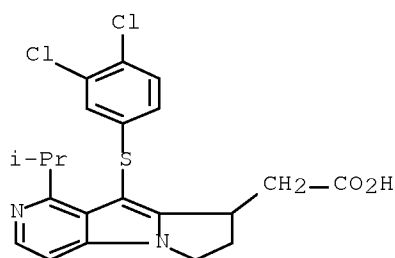
CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(4-chlorophenyl)thio]-7,8-dihydro-1-(methylsulfonyl)- (CA INDEX NAME)



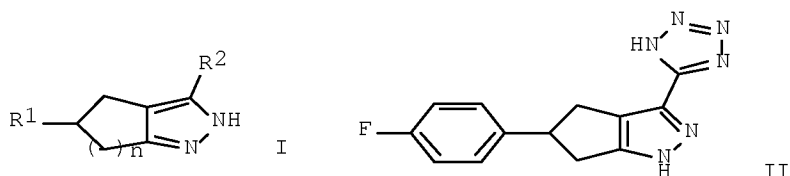
RN 688357-17-7 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-

7,8-dihydro-1-(1-methylethyl)- (CA INDEX NAME)



L4 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN  
GI



AB Title compds. represented by the formula I [wherein R1 = (un)substituted cyclohexyl, Ph or heteroaryl; R2 = tetrazol-5-yl, 2,4-dioxo-oxazol-5-yl or CO2R; R = H or alkyl; n = 1 or 2; and pharmaceutically acceptable salts or solvates thereof] were prepared as Niacin receptor agonists. For example, II was provided in a multi-step synthesis starting from 3-ethoxy cyclopentenone. Certain I an IC50 in the niacin binding assay within the range of about 0.010-50 μM, and have an EC50 in the functional GTPγS binding assay within the range of about 0.010-100 μM. Thus, I and their pharmaceutical compns. are useful as Niacin receptor agonists for the treatment of dyslipidemias (no data).

AN 2006:1124674 CAPLUS [Full-text](#)

DN 145:455008

TI Preparation of pyrazole derivatives as Niacin receptor agonists

IN Imbriglio, Jason E.; Colletti, Steven L.; Tata, James R.; Liang, Rui; Raghavan, Subharekha; Schmidt, Darby R.; Smenton, Abigail R.; Chan, Sook Yee

PA Merck & Co., Inc., USA

SO PCT Int. Appl., 83pp.  
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

|    | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|----|---|------|----------|-----------------|----------|
|    | -----   | ---- | -----    | -----           | -----    |
| PI | WO 2006113150   | A1   | 20061026 | WO 2006-US12876 | 20060407 |
|    | W:  |      |          |                 |          |
|    | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, |      |          |                 |          |

MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

|                |  |          |                  |   |          |
|----------------|--|----------|------------------|---|----------|
|                |  |          | US 2005-670764P  | P | 20050413 |
| AU 2006236939  | A1   | 20061026 | AU 2006-236939   |   | 20060407 |
|                |  |          | US 2005-670764P  | P | 20050413 |
|                |  |          | WO 2006-US12876  | W | 20060407 |
| CA 2603757     | A1   | 20061026 | CA 2006-2603757  |   | 20060407 |
|                |  |          | US 2005-670764P  | P | 20050413 |
|                |  |          | WO 2006-US12876  | W | 20060407 |
| EP 1874301     | A1   | 20080109 | EP 2006-740649   |   | 20060407 |
| R:             | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR |          |                  |   |          |
|                |  |          | US 2005-670764P  | P | 20050413 |
|                |  |          | WO 2006-US12876  | W | 20060407 |
| IN 2007CN04216 | A  | 20071221 | IN 2007-CN4216   |   | 20070924 |
|                |  |          | US 2005-670764P  | P | 20050413 |
|                |  |          | WO 2006-US12876  | W | 20060407 |
| CN 101160125   | A  | 20080409 | CN 2006-80012066 |   | 20071012 |
|                |  |          | US 2005-670764P  | P | 20050413 |
|                |  |          | WO 2006-US12876  | W | 20060407 |

OS MARPAT 145:455008

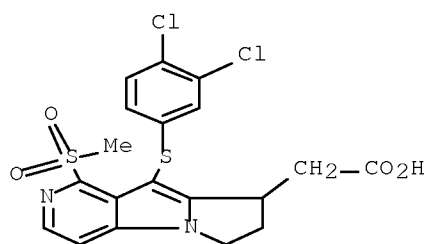
IT 688356-96-9P 688357-16-6P 688357-17-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyrazole derivs. as Niacin receptor agonists)

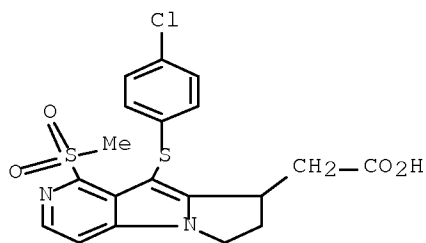
RN 688356-96-9 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(methylsulfonyl)- (CA INDEX NAME)



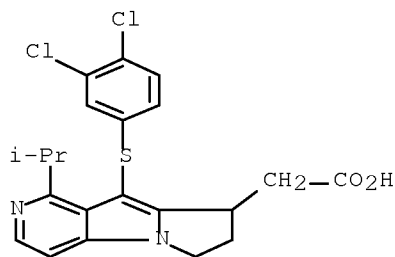
RN 688357-16-6 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(4-chlorophenyl)thio]-7,8-dihydro-1-(methylsulfonyl)- (CA INDEX NAME)



RN 688357-17-7 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(1-methylethyl)- (CA INDEX NAME)

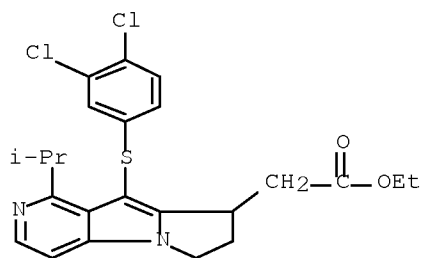


IT 688357-25-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of pyrazole derivs. as Niacin receptor agonists)

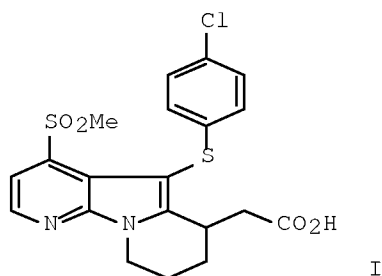
RN 688357-25-7 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(1-methylethyl)-, ethyl ester (CA INDEX NAME)



RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN  
GI



AB A method of treating atherosclerosis is disclosed wherein nicotinic acid or another nicotinic acid receptor agonist is administered to the patient in combination with a DP (prostaglandin D2) receptor antagonist. E.g, I was prepared by a series of reactions starting from 4-chloronicotinaldehyde. The compds. prepared function as selective DP antagonists and demonstrate an affinity for DP that is at least about 10 times higher than the affinity for CRTH2 receptors.

AN 2006:844718 CAPLUS Full-text

DN 145:271745

TI Preparation of pyridoindolizine and pyridoindole derivatives for treating atherosclerosis, dyslipidemias and related conditions

IN Fitzpatrick, Shaun; Seiler, Christian; Hardy, Ian; Waters, M., Gerard; Lai, Eseng

PA Merck & Co., Inc., USA

SO PCT Int. Appl., 66pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

|    | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE       |
|----|---|------|----------|-----------------|------------|
|    | -----   | ---- | -----    | -----           | -----      |
| PI | WO 2006089309   | A2   | 20060824 | WO 2006-US6951  | 20060215   |
|    | WO 2006089309   | A3   | 20070518 |                 |            |
|    | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |      |          |                 |            |
|    | RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA  |      |          |                 |            |
|    |   |      |          | US 2005-654703P | P 20050217 |
| AU | 2006214018  | A1   | 20060824 | AU 2006-214018  | 20060215   |
|    |   |      |          | US 2005-654703P | P 20050217 |
|    |   |      |          | WO 2006-US6951  | W 20060215 |
| CA | 2598273   | A1   | 20060824 | CA 2006-2598273 | 20060215   |
|    |   |      |          | US 2005-654703P | P 20050217 |
|    |   |      |          | WO 2006-US6951  | W 20060215 |
| EP | 1855649   | A2   | 20071121 | EP 2006-721098  | 20060215   |
|    | R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU   |      |          |                 |            |

|                |    |          |                  |   |          |
|----------------|----|----------|------------------|---|----------|
| US 20080139604 | A1 | 20080612 | US 2005-654703P  | P | 20050217 |
|                |    |          | WO 2006-US6951   | W | 20060215 |
|                |    |          | US 2007-795484   |   | 20070718 |
|                |    |          | US 2005-654703P  | P | 20050217 |
| IN 2007CN03290 | A  | 20071109 | WO 2006-US6951   | W | 20060215 |
|                |    |          | IN 2007-CN3290   |   | 20070726 |
|                |    |          | US 2005-654703P  | P | 20050217 |
|                |    |          | WO 2006-US6951   | W | 20060215 |
| CN 101189011   | A  | 20080528 | CN 2006-80005127 |   | 20070816 |
|                |    |          | US 2005-654703P  | P | 20050217 |
|                |    |          | WO 2006-US6951   | W | 20060215 |

IT 887146-42-1P 887146-43-2P

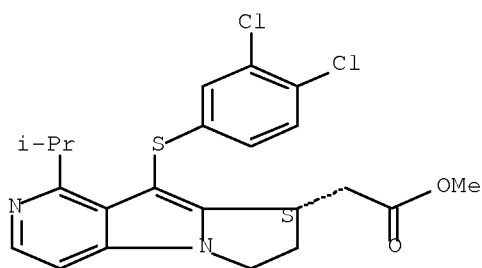
RL: PAC (Pharmacological activity); PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

(preparation of pyridoindolizine and pyridoindole derivs for treating atherosclerosis, dyslipidemias and related conditions)

RN 887146-42-1 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(1-methylethyl)-, methyl ester, (8S)- (CA INDEX NAME)

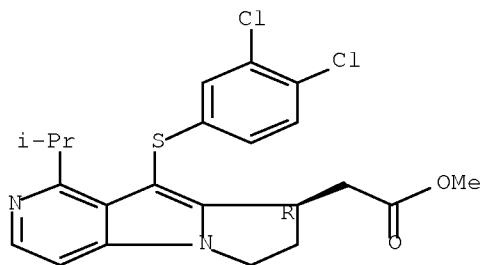
Absolute stereochemistry.



RN 887146-43-2 CAPLUS

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Absolute stereochemistry.



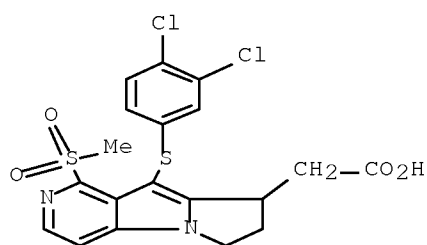
IT 688356-96-9P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of pyridoindolizine and pyridoindole derivs for treating atherosclerosis, dyslipidemias and related conditions)

RN 688356-96-9 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(methylsulfonyl)- (CA INDEX NAME)



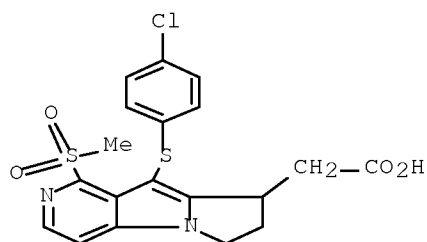
IT 688357-16-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyridoindolizine and pyridoindole derivs for treating atherosclerosis, dyslipidemias and related conditions)

RN 688357-16-6 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(4-chlorophenyl)thio]-7,8-dihydro-1-(methylsulfonyl)- (CA INDEX NAME)



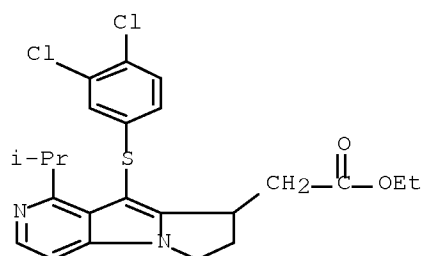
IT 688357-25-7P

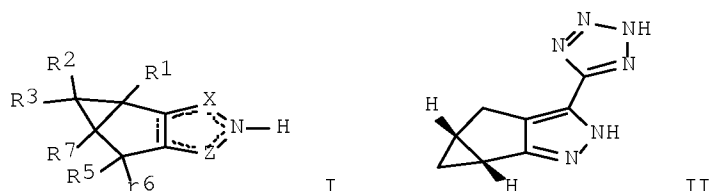
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of pyridoindolizine and pyridoindole derivs for treating atherosclerosis, dyslipidemias and related conditions)

RN 688357-25-7 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(1-methylethyl)-, ethyl ester (CA INDEX NAME)





AB The invention relates to certain fused pyrazole derivs. of formula I, and pharmaceutically acceptable salts thereof, which exhibit useful pharmacol. properties, for example, as agonists for the RUP25 receptor. Compds. of formula I wherein X is N, and Z is CR7, or X is CR7 and Z is N; one dotted lines are single and double bonds such that the ring containing X and Z is a pyrazole ring; R1 - R6 are independently H, C1-6 acyl(oxy), C2-6 alkenyl, C1-6 alkoxy, C1-6 alkyl(amino), C1-6 alkyl(thio)carboxamide, C2-6 alkynyl, etc.; R7 is carbo-C1-6 alkoxy, carboxy, or tetrazol-5-yl; and their pharmaceutically acceptable salts, hydrates, or solvates thereof are claimed. Also provided by the invention are pharmaceutical compns. containing compds. of the invention, and methods of using the compds. and compns. of the invention in the treatment of metabolic-related disorders, including dyslipidemia, atherosclerosis, coronary heart disease, insulin resistance, type 2 diabetes, Syndrome-X and the like. In addition, the invention also provides for the use of the compds. of the invention in combination with other active agents such as those belonging to the class of  $\alpha$ -glucosidase inhibitors, aldose reductase inhibitors, biguanides, HMG-CoA reductase inhibitors, squalene synthesis inhibitors, fibrates, LDL catabolism enhancers, angiotensin converting enzyme (ACE) inhibitors, insulin secretion enhancers, DP receptor antagonists, and the like. Example compound II was prepared by cyclization of (R)-2-(3-butenyl)oxirane; the resulting bicyclo[3.2.1]hexan-2-ol underwent oxidation of give bicyclo[3.2.1]hexane-2-one, which underwent cyclization with di-Et oxalate and hydrazine to give 1a,2,5,5a-tetrahydro-1H-2,3-diazacyclopropa[a]pentalene-4-carboxylic acid Et ester, which underwent amidation with ammonium hydroxide to give the corresponding amide, which benzylation with benzyl bromide followed by dehydration to give 2-benzyl-1a,2,5,5a-tetrahydro-1H-2,3-diazacyclopropa[a]pentalene-4- carbonitrile, which reacted with sodium azide to give 2-Benzyl-4-(2H- tetrazol-5-yl)-1a,2,5,5a-tetrahydro-2,3-diazacyclopropa[a]pentalene, which underwent debenylation to give example compound II. All the invention compds. were evaluated for their antihyperglycemic activity, and 35S-GTP $\gamma$ S, human RUP25, and 3H-nicotinic acid receptor binding affinities. Certain compds. were determined to have an EC50 value in the cAMP whole cell method of about 25  $\mu$ M or less. From the in vitro GTP $\gamma$ S binding assay, it was determined that tested compds. exhibited EC50 values in the range of about 1-100  $\mu$ M, and the best compds. showed an EC50 value of less than about 1  $\mu$ M. Certain tested compds. have an EC50 in the 3H-nicotinic acid binding competition assay, in the range of 1 to 100  $\mu$ M , and the most favorable compds. exhibited an EC50 value of less than about 1  $\mu$ M.

DN 145:103670  
 TI Fused pyrazole derivatives and their preparation, pharmaceutical  
 compositions, and methods for treatment of metabolic-related disorders  
 IN Boatman, Douglas P.; Schrader, Thomas O.; Semple, Graeme; Skinner, Philip  
 J.; Jung, Jae-Kyu  
 PA Arena Pharmaceuticals, Inc., USA  
 SO PCT Int. Appl., 170 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

|                | PATENT NO.  | KIND     | DATE             | APPLICATION NO. | DATE       |
|----------------|---|----------|------------------|-----------------|------------|
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|                | MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, |          |                  |                 |            |
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|                | BA, HR, MK, YU  |          |                  |                 |            |
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| IN 2007KN02303 | A   | 20070817 | IN 2007-KN2303   |                 | 20070621   |
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OS MARPAT 145:103670

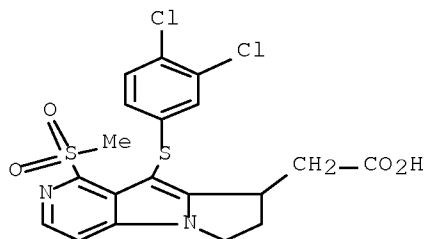
IT 688356-96-9P 688357-16-6P 688357-17-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of fused pyrazole derivs. and methods for treatment of metabolic-related disorders)

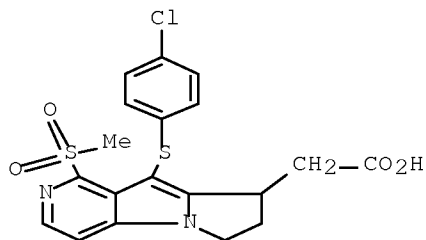
RN 688356-96-9 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(methylsulfonyl)- (CA INDEX NAME)



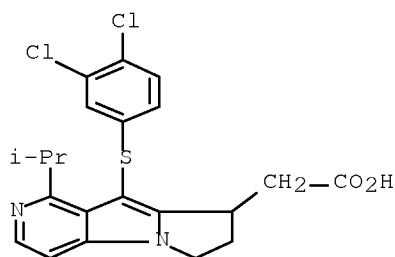
RN 688357-16-6 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(4-chlorophenyl)thio]-7,8-dihydro-1-(methylsulfonyl)- (CA INDEX NAME)

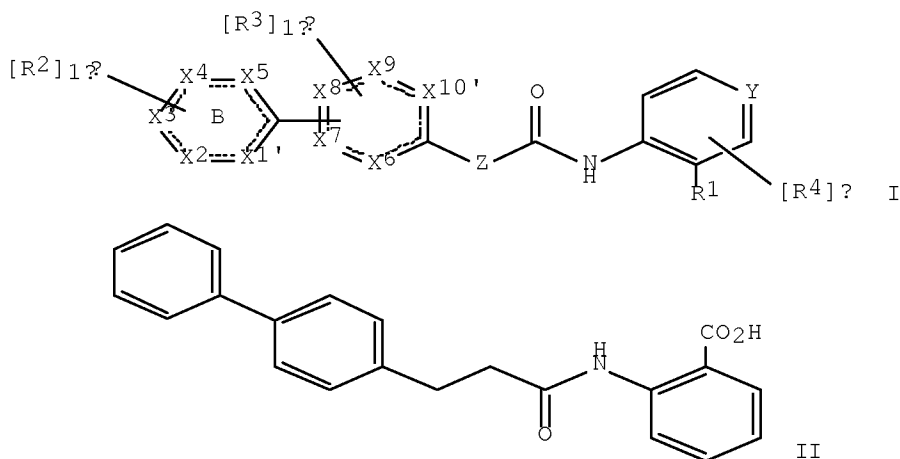


RN 688357-17-7 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(1-methylethyl)- (CA INDEX NAME)



L4 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN  
GI



AB The invention is related to biaryls I [Y = C, N; Z = C(RaRb)<sub>n</sub>; Ra, Rb = independently H, alkyl, OH, F, etc.; n = 1-5; R1 = CO<sub>2</sub>H, 1H-tetrazol-5-yl, CONHSO<sub>2</sub>Rc; Rc = (un)substituted alkyl, Ph; X10' = (X10)<sub>0-1</sub>; X1' = (X1)<sub>0-1</sub> X1-X10 = C, or a heteroatom selected from O, S, and N, with provisos; each R2 = H, F, Cl, Br, I, alkyl, heterocyclyl, etc.; or two R2 groups taken together can form a fused Ph or fused heterocycle with ring B; each R3 = H, halo, halo/alkyl, halo/alkoxy, etc.; each R4 = H, halo, Me, etc.], as well as pharmaceutically acceptable salts, solvates, as niacin receptor agonists useful for treating atherosclerosis and dyslipidemias in combination with DP antagonists. The invention is also related to the preparation of DP antagonists. Pharmaceutical compns. comprising I are also included. Thus, anthranilide II was prepared by Pd-coupling of 3-(4-iodophenyl)propionic acid with phenylboronic acid, chlorination of biaryl propionic acid (no data) with SOCl<sub>2</sub>, and amidation of acyl chloride (no data) with anthranilic acid. I have an EC<sub>50</sub> in the functional assay in vitro GTPγS binding assay within the range of about less than 1 μM to as high as about 100 μM. Have an IC<sub>50</sub> in the 3H-nicotinic acid competition binding assay within the range of 1 nM to about 25 μM. Selected I do not exhibit measurable in vivo vasodilation in the murine flushing model at doses up to 100 mg/kg or 300 mg/kg in the presence of DP antagonists.

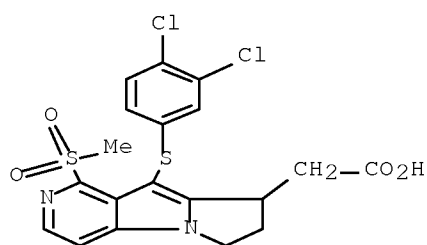
AN 2006:513667 CAPLUS Full-text

DN 145:27731  
 TI Preparation of biaryl compounds, particularly N-  
 (biarylpropionyl)anthranilides, as niacin receptor agonists and  
 pyridoindolizine derivatives as DP receptor antagonists, their  
 pharmaceutical compositions and their combination useful for treating  
 atherosclerosis and dyslipidemias  
 IN Colletti, Steven L.; Tata, James R.; Shen, Hong C.; Ding, Fa-Xiang; Frie,  
 Jessica L.; Imbriglio, Jason E.; Chen, Weichun  
 PA Merck & Co., Inc., USA  
 SO PCT Int. Appl., 100 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

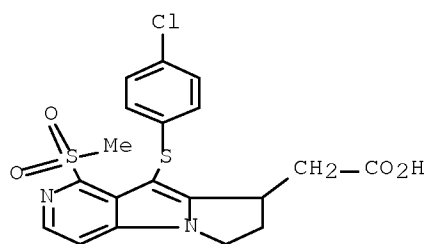
|    | PATENT NO.     | KIND   | DATE     | APPLICATION NO.  | DATE       |
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|    | W:             | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |          |                  |            |
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|    | EP 1824812     | A2   | 20070829 | EP 2005-824876   | 20051118   |
|    | R:             | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR   |          |                  |            |
|    |                |  |          | US 2004-630281P  | P 20041123 |
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|    | CN 101061092   | A  | 20071024 | CN 2005-80039913 | 20051118   |
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|    | IN 2007CN01774 | A  | 20070831 | IN 2007-CN1774   | 20070430   |
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OS MARPAT 145:27731  
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 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU  
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES  
 (Uses)  
 (DP receptor antagonist; preparation of biaryl compds. as niacin receptor  
 agonists and pyridoindolizine derivs. as DP receptor antagonists and  
 their combination useful for treating atherosclerosis and  
 dyslipidemias)

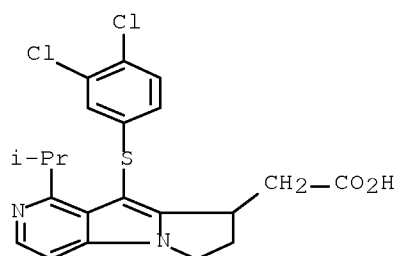
RN 688356-96-9 CAPLUS  
 CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(methylsulfonyl)- (CA INDEX NAME)



RN 688357-16-6 CAPLUS  
 CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(4-chlorophenyl)thio]-7,8-dihydro-1-(methylsulfonyl)- (CA INDEX NAME)

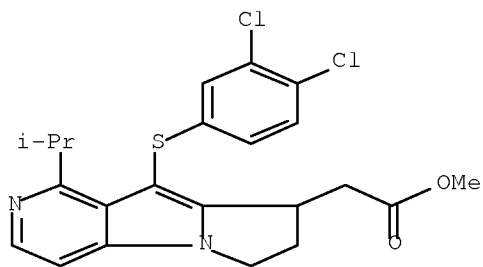


RN 688357-17-7 CAPLUS  
 CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(1-methylethyl)- (CA INDEX NAME)



IT 688357-27-9P 688357-28-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of biaryl compds. as niacin receptor agonists and  
 pyridoindolizine derivs. as DP receptor antagonists and their  
 combination useful for treating atherosclerosis and dyslipidemias)  
 RN 688357-27-9 CAPLUS  
 CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(1-methylethyl)-, methyl ester, (+)- (CA INDEX NAME)

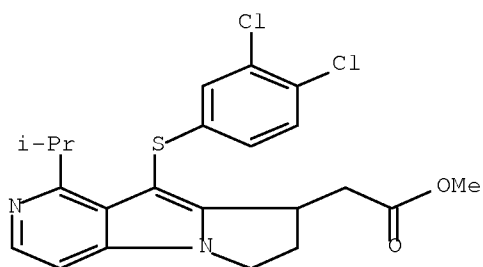
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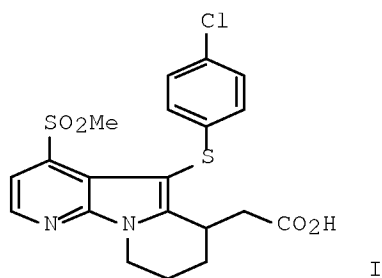
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Rotation (-).



L4 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN  
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I

AB A method of treating pathol. blushing is disclosed wherein the patient is administered a DP (prostaglandin D2) receptor antagonist. E.g, I was prepared by a series of reactions starting from 4-chloronicotinaldehyde. The compds. prepared function as selective DP antagonists and demonstrate an affinity for DP that is at least about 10 times higher than the affinity for CRTH2 receptors.

AN 2006:471897 CAPLUS Full-text

DN 144:488635  
 TI Preparation of compounds such as pyridoindolizine and indole derivatives  
 as prostaglandin D2 antagonists for treating pathological blushing  
 IN Tobert, Jonathan A.; Lai, Eseng  
 PA Merck & Co., Inc., USA  
 SO PCT Int. Appl., 40 pp.  
 CODEN: PIXXD2

DT Patent  
 LA English

FAN.CNT 1

|    | PATENT NO.     | KIND   | DATE     | APPLICATION NO. | DATE       |
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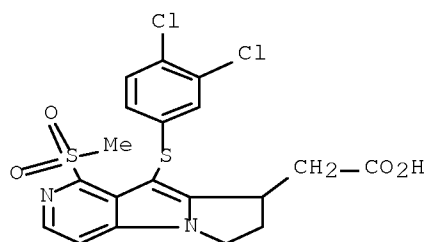
OS CASREACT 144:488635

IT 688356-96-9P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (preparation of compds. such as pyridoindolizine and indole derivs. as prostaglandin D2 antagonists for treating pathol. blushing)

RN 688356-96-9 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(methylsulfonyl)- (CA INDEX NAME)



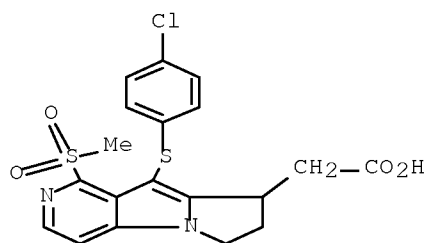
IT 688357-16-6P 688357-17-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of compds. such as pyridoindolizine and indole derivs. as prostaglandin D2 antagonists for treating pathol. blushing)

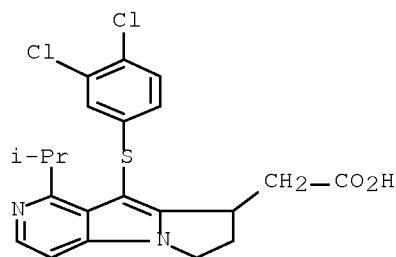
RN 688357-16-6 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(4-chlorophenyl)thio]-7,8-dihydro-1-(methylsulfonyl)- (CA INDEX NAME)



RN 688357-17-7 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(1-methylethyl)- (CA INDEX NAME)



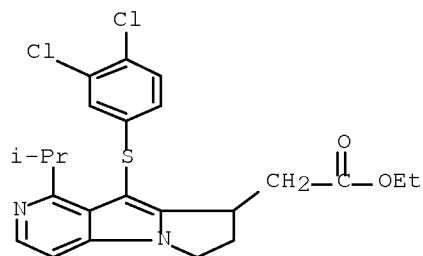
IT 688357-25-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of compds. such as pyridoindolizine and indole derivs. as prostaglandin D2 antagonists for treating pathol. blushing)

RN 688357-25-7 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(1-methylethyl)-, ethyl ester (CA INDEX NAME)



IT 887146-42-1P 887146-43-2P

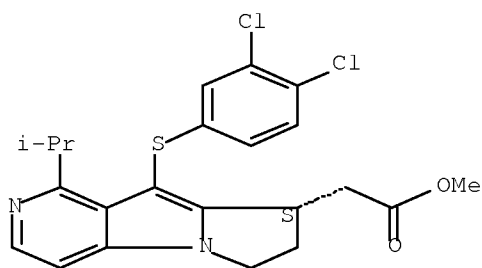
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of compds. such as pyridoindolizine and indole derivs. as prostaglandin D2 antagonists for treating pathol. blushing)

RN 887146-42-1 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(1-methylethyl)-, methyl ester, (8S)- (CA INDEX NAME)

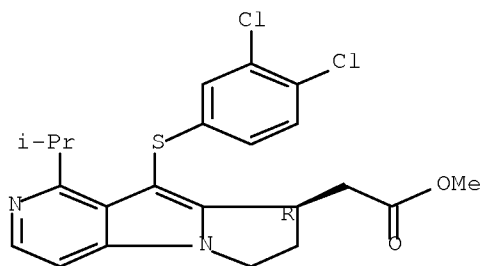
Absolute stereochemistry.



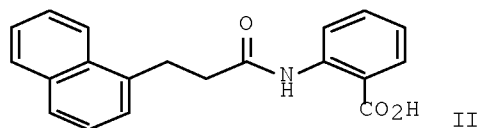
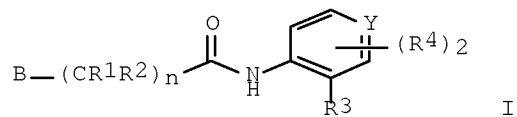
RN 887146-43-2 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(1-methylethyl)-, methyl ester, (8R)- (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN  
GI



AB The invention relates to niacin receptor agonists of formula I; as well as pharmaceutically acceptable salts and solvates. The compds. are useful for treating dyslipidemias, and in particular, reducing serum LDL, VLDL and triglycerides, and raising HDL levels. Pharmaceutical compns. and methods of treatment are also included. Compds. of formula I wherein Y is C or N; R1 and R2 are independently H, (halo)C1-3 alkyl(oxy), OC1-3 alkyl, OH, or F; R3 is Co2H, tetrazolyl, or CONHSO2H and derivs.; R4 is H, halo, or (halo)methyl; B is (un)substituted 10-membered bicyclic aryl, (un)substituted 9- to 10-membered bicyclic heteroaryl, or (un)substituted 12- to 13-membered tricyclic heteroaryl; n is an integer from 1 to 4, such that when (CR1R2)n represent CH(Me)CH2, the ring B is (un)substituted bicyclic aryl; and their pharmaceutically acceptable salts and solvates thereof. Example compound II was prepared by amidation of 3-(1-naphthyl)acrylic acid with Me anthranilate followed by catalytic hydrogenation. All the invention compds. were tested for their niacin receptor affinity. From the assay, it was determined that most of the compds. in general exhibited in vitro EC50 values in the range of about 1  $\mu$ M to as high as about 100  $\mu$ M.

AN 2006:469551 CAPLUS Full-text

DN 144:488409

TI N-Acyl anthranilic acid and related compounds as niacin receptor agonists, and their preparation, pharmaceutical compositions and methods of treatment of dyslipidemias

IN Colletti, Steven L.; Beresis, Richard T.; Chen, Weichun; Tata, James R.; Shen, Hong C.; Marley, Daria M.; Deng, Qiaolin; Frie, Jessica L.; Ding, Fa-Xiang

PA Merck & Co., Inc., USA

SO PCT Int. Appl., 125 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

|    | PATENT NO.    | KIND   | DATE     | APPLICATION NO.  | DATE       |
|----|---------------|--|----------|------------------|------------|
| PI | WO 2006052555 | A2   | 20060518 | WO 2005-US39523  | 20051030   |
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|    |               |  |          | US 2004-624816P  | P 20041104 |
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|                |    |          | WO 2005-US39523 | W | 20051030 |
| IN 2007CN01653 | A  | 20070831 | IN 2007-CN1653  |   | 20070423 |
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|                |    |          | WO 2005-US39523 | W | 20051030 |
| US 20070299101 | A1 | 20071227 | US 2007-666966  |   | 20070502 |
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OS MARPAT 144:488409

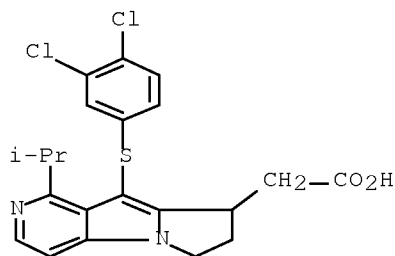
IT 688357-17-7P

RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(drug candidate; preparation of N-acyl anthranilic acid and related compds. as niacin receptor agonists and their methods of treatment of dyslipidemias)

RN 688357-17-7 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(1-methylethyl)- (CA INDEX NAME)



IT 887401-58-3P 887401-59-4P

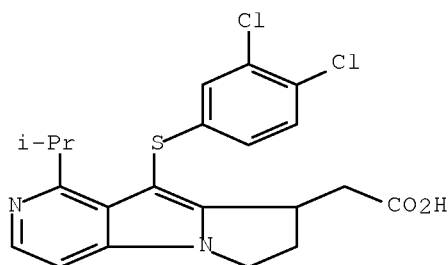
RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of N-acyl anthranilic acid and related compds. as niacin receptor agonists and their methods of treatment of dyslipidemias)

RN 887401-58-3 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(1-methylethyl)-, (+)- (CA INDEX NAME)

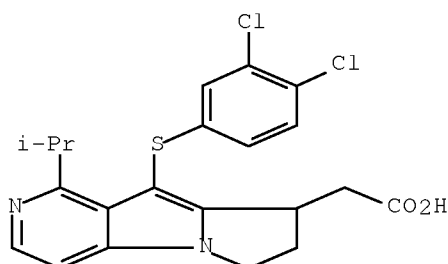
Rotation (+).



RN 887401-59-4 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(1-methylethyl)-, (-)- (CA INDEX NAME)

Rotation (-).



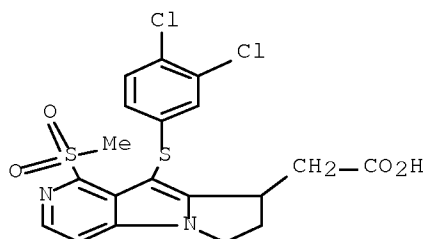
IT 688356-96-9P 688357-16-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of N-acyl anthranilic acid and related compds. as niacin receptor agonists and their methods of treatment of dyslipidemias)

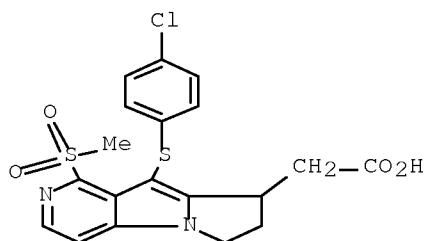
RN 688356-96-9 CAPLUS

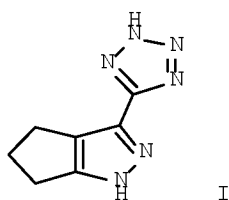
CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(methylsulfonyl)- (CA INDEX NAME)



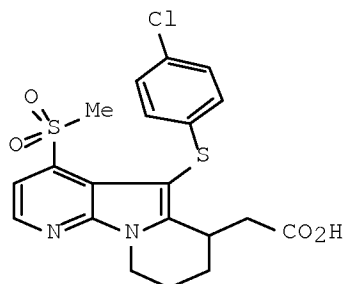
RN 688357-16-6 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(4-chlorophenyl)thio]-7,8-dihydro-1-(methylsulfonyl)- (CA INDEX NAME)





I



II

AB The invention is related to a method of treating atherosclerosis, dyslipidemia and related conditions wherein a nicotinic acid receptor partial/agonist I, or one of its pharmaceutically acceptable salts or solvates, is administered to a human patient in combination with a DP receptor antagonist, e.g. II, in amts. that are effective for treatment in the absence of substantial flushing. The invention is also related to the preparation of tetrazole I and DP antagonists. Thus, I was prepared by reaction of cyclopentanone with diethylmalonate (no data for the intermediate), followed by cyclization with hydrazine hydrochloride, amidation of the ester with methanolic ammonia, dehydration of the amide, and cyclization of the nitrile with NaN<sub>3</sub>. An 11-step synthesis was given for pyridoindolizine II (no data for the intermediates). II, and its derivs., having a binding affinity (K<sub>i</sub>) for CRTH2 of about  $\geq 0.5 \mu\text{M}$ , and a selectivity for the DP receptor over CRTH2 of at least about 10 fold, are useful to inhibit the flushing effect seen when tetrazole I or its pharmaceutically acceptable salts or solvates are administered alone.

AN 2006:212213 CAPLUS Full-text

DN 144:292761

TI Preparation of 3-(2H-tetrazol-5-yl)-1,4,5,6-tetrahydrocyclopentapyrazole as nicotinic agonist and pyridoindolizine derivatives as DP receptor antagonists, and their combination useful for treating atherosclerosis, dyslipidemias and related conditions

IN Waters, M. Gerard; Turner, Mervyn

PA Merck & Co., Inc., USA

SO PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.

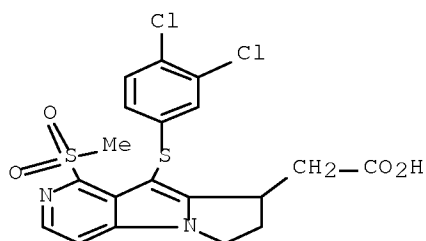
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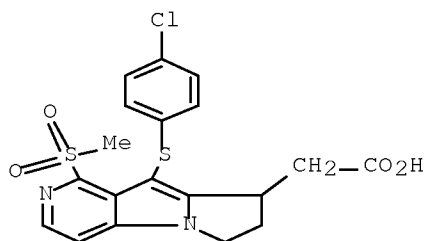
APPLICATION NO.

DATE

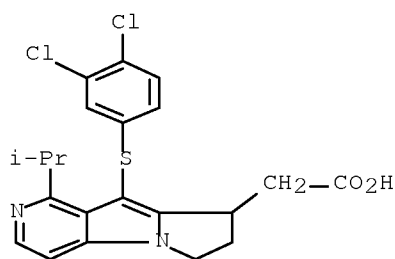
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| PI | WO 2006026273   | A2 | 20060309 | WO 2005-US30001 | 20050824   |
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|    | US 20070244107  | A1 | 20071018 | US 2004-604443P | P 20040825 |
|    |   |    |          | US 2007-631741  | 20070105   |
|    |   |    |          | US 2004-604443P | P 20040825 |
|    |   |    |          | WO 2005-US30001 | W 20050824 |
| OS | CASREACT 144:292761   |    |          |                 |            |
| IT | 688356-96-9P 688357-16-6P 688357-17-7P  |    |          |                 |            |
|    | RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU<br>(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES<br>(Uses)<br>(DP receptor antagonist; preparation of a nicotinic agonist and DP receptor<br>antagonists, and their combination useful for treating atherosclerosis,<br>dyslipidemias and related conditions)   |    |          |                 |            |
| RN | 688356-96-9 CAPLUS  |    |          |                 |            |
| CN | 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(methylsulfonyl)- (CA INDEX NAME)   |    |          |                 |            |



|    |   |        |
|----|---|--------|
| RN | 688357-16-6   | CAPLUS |
| CN | 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(4-chlorophenyl)thio]-7,8-dihydro-1-(methylsulfonyl)- (CA INDEX NAME) |        |



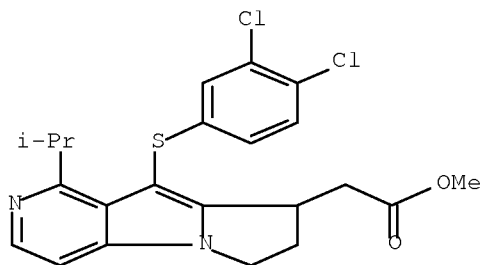
RN 688357-17-7 CAPLUS  
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 7,8-dihydro-1-(1-methylethyl)- (CA INDEX NAME)



IT 688357-27-9P 688357-28-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of a nicotinic agonist and DP receptor antagonists, and their  
 combination useful for treating atherosclerosis, dyslipidemias and  
 related conditions)

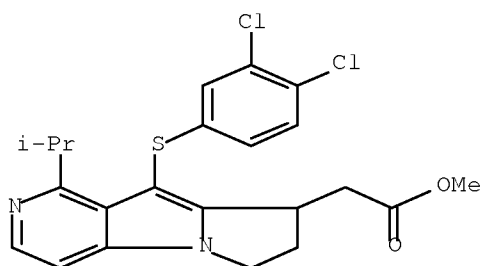
RN 688357-27-9 CAPLUS  
 CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-  
 7,8-dihydro-1-(1-methylethyl)-, methyl ester, (+)- (CA INDEX NAME)

Rotation (+).



RN 688357-28-0 CAPLUS  
 CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-  
 7,8-dihydro-1-(1-methylethyl)-, methyl ester, (-)- (CA INDEX NAME)

Rotation (-).



L4 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN  
 AB A method of treating atherosclerosis is disclosed wherein nicotinic acid or another nicotinic acid receptor agonist is administered to the patient in combination with a DP receptor antagonist. The DP receptor antagonist is administered to reduce, prevent or eliminate flushing that may otherwise occur.  
 AN 2004:999670 CAPLUS Full-text  
 DN 141:420447  
 TI Method of treating atherosclerosis, dyslipidemias and related conditions  
 IN Cheng, Kang; Waters, M. Gerard; Metters, Kathleen M.; O'Neill, Gary  
 PA USA  
 SO U.S. Pat. Appl. Publ., 33 pp.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 FAN.CNT 1

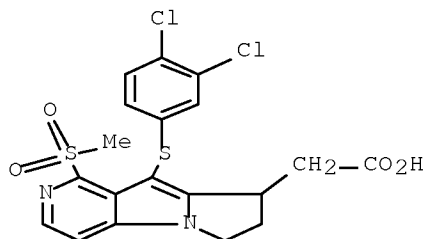
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| PI | US 20040229844  | A1   | 20041118 | US 2004-844773   | 20040513   |
|    |   |      |          | US 2003-470665P  | P 20030515 |
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|    |   |      |          | US 2003-470665P  | P 20030515 |
|    |   |      |          | WO 2004-US14980  | W 20040513 |
|    | CA 2525772  | A1   | 20041202 | CA 2004-2525772  | 20040513   |
|    |   |      |          | US 2003-470665P  | P 20030515 |
|    |   |      |          | WO 2004-US14980  | W 20040513 |
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|    |   |      |          | US 2003-470665P  | P 20030515 |
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| IN | 2005DN04759   | A    | 20071207 | IN 2005-DN4759   | 20051019   |
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|               |   |          | KR 2005-721795  | A3 | 20051115 |

IT 688356-96-9P 688357-16-6P 688357-17-7P  
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (method of treating atherosclerosis, dyslipidemias and related conditions)

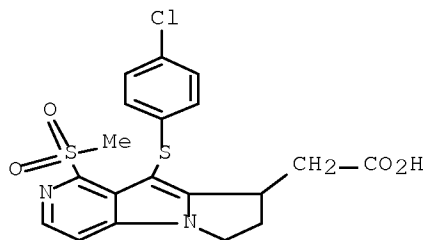
RN 688356-96-9 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(methylsulfonyl)- (CA INDEX NAME)



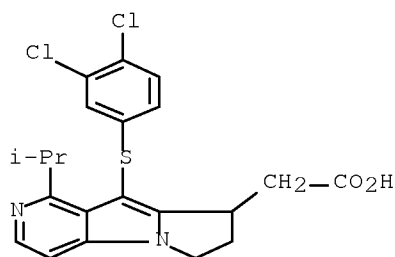
RN 688357-16-6 CAPLUS

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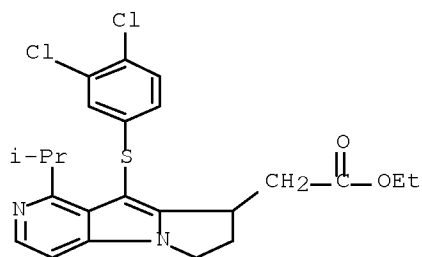


RN 688357-17-7 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(1-methylethyl)- (CA INDEX NAME)

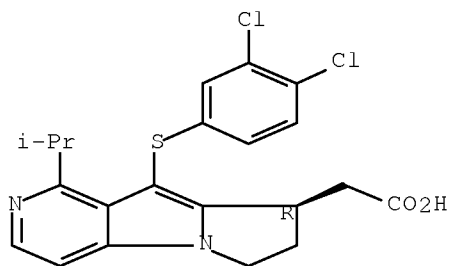


IT ~~688357-25-7P~~ ~~794535-39-0P~~ ~~794535-46-9P~~  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (method of treating atherosclerosis, dyslipidemias and related  
 conditions)  
 RN ~~688357-25-7~~ CAPLUS  
 CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-  
 7,8-dihydro-1-(1-methylethyl)-, ethyl ester (CA INDEX NAME)



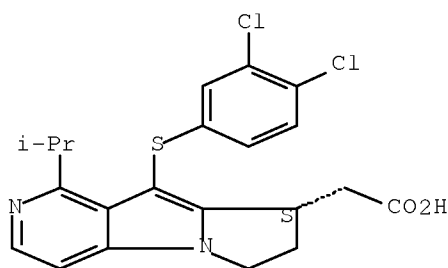
RN 794535-39-0 CAPLUS  
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 7,8-dihydro-1-(1-methylethyl)-, (8R)- (CA INDEX NAME)

Absolute stereochemistry.



RN 794535-46-9 CAPLUS  
 CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-  
 7,8-dihydro-1-(1-methylethyl)-, (8S)- (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. I [wherein G = O(CH<sub>2</sub>)<sub>1-2</sub>, S(CH<sub>2</sub>)<sub>1-2</sub>, (un)substituted C<sub>1-3</sub>alkyl; Ar = hetero/aryl optionally substituted with R<sub>g</sub>; Q = CO<sub>2</sub>H, CONH<sub>2</sub> and derivs., SO<sub>2</sub>NH<sub>2</sub> and derivs., SO<sub>3</sub>H, PO<sub>3</sub>H<sub>2</sub> and tetrazolyl; one of A, B, C, or D is N and the others are independently selected from CH and CR<sub>g</sub>; E = (CH<sub>2</sub>)<sub>a</sub>-X-(CH<sub>2</sub>)<sub>b</sub>, phenylene, cycloalkylidene, cycloalkylene, etc.; a, b = 0-1, X = a bond, O, S, NH and derivs., etc.; F = (CH<sub>2</sub>)<sub>m</sub> and derivs., CH:CH and derivs.; m = 1-3; R<sub>1</sub> = H, CN, OH and derivs., (un)substituted alkyl, etc.; R<sub>2</sub> = H, alkyl optionally substituted with 1-6 halogens; R<sub>1</sub>R<sub>2</sub> = oxo; or R<sub>1</sub>R<sub>2</sub> = (un)substituted 3- or 4-membered ring, optionally containing 1 heteroatom; R<sub>3</sub> = H, (un)substituted alkyl; R<sub>g</sub> = halo, CN, CHO, CO<sub>2</sub>H and derivs., CONH<sub>2</sub> and derivs., NH<sub>2</sub> and derivs., NO<sub>2</sub>, alkoxy, OCONH<sub>2</sub> and derivs., SO<sub>2</sub>-alkyl, (un)substituted alk/en/yl, etc.] were prepared as prostaglandin receptor, in particular PGD<sub>2</sub>, antagonists useful for the treatment of prostaglandin-mediated diseases such as allergic rhinitis, nasal congestion and asthma (no data). Six biol. assays are given (no data). Thus, reaction of II (preparation given) with a mixture of bis(3,4-dichlorophenyl)disulfide, SO<sub>2</sub>Cl<sub>2</sub>, 1,2-dichloroethane, followed by hydrolysis gave the pyridoindoliziny acid III.

AN 2004:390250 CAPLUS Full-text

DN 140:406734

TI Preparation of pyridopyrrolizines and pyridoindolizines as prostaglandin receptor, in particular PGD<sub>2</sub>, antagonists

IN Leblanc, Yves; Dufresne, Claude; Roy, Patrick

PA Merck Frosst Canada & Co., Can.

SO PCT Int. Appl., 68 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

|    | PATENT NO.    | KIND   | DATE     | APPLICATION NO. | DATE     |
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| PI | WO 2004039807 | A1   | 20040513 | WO 2003-CA1658  | 20031028 |
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KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,  
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

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OS MARPAT 140:406734

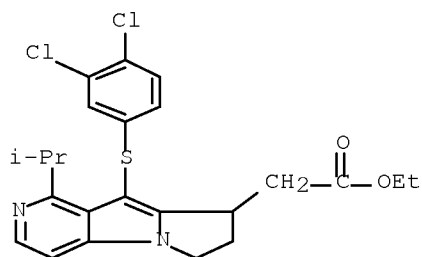
IT 688357-25-7

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of pyridopyrrolizines and pyridoindolizines as prostaglandin D2  
receptor antagonists)

RN 688357-25-7 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-  
7,8-dihydro-1-(1-methylethyl)-, ethyl ester (CA INDEX NAME)



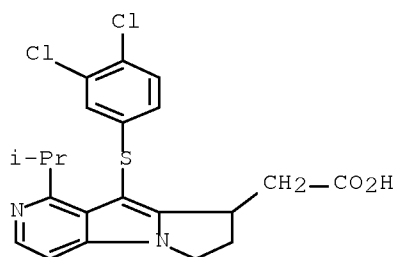
IT 688357-17-7P 688357-27-9P 688357-28-0P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prostaglandin D2 receptor antagonist; preparation of pyridopyrrolizines and pyridoindolizines as prostaglandin D2 receptor antagonists)

RN 688357-17-7 CAPLUS

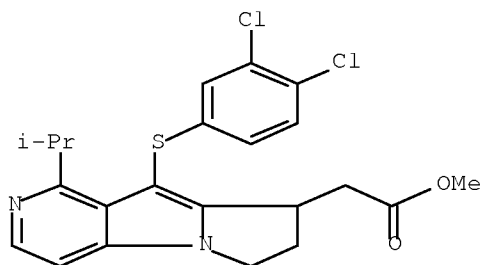
CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(1-methylethyl)- (CA INDEX NAME)



RN 688357-27-9 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(1-methylethyl)-, methyl ester, (+)- (CA INDEX NAME)

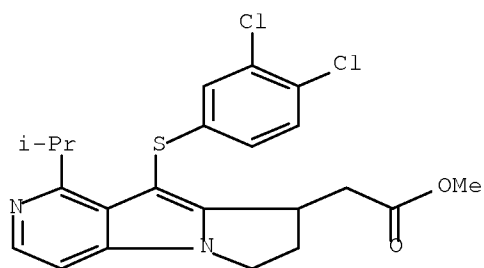
Rotation (+).



RN 688357-28-0 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-7,8-dihydro-1-(1-methylethyl)-, methyl ester, (-)- (CA INDEX NAME)

Rotation (-).



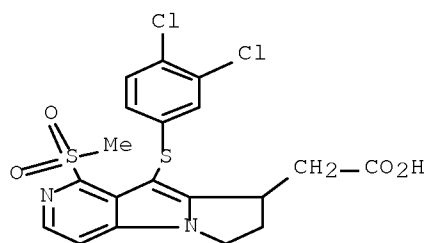
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RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU  
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES  
 (Uses)

(prostaglandin D2 receptor antagonist; preparation of pyridopyrrolizines and  
 pyridoindolizines as prostaglandin D2 receptor antagonists)

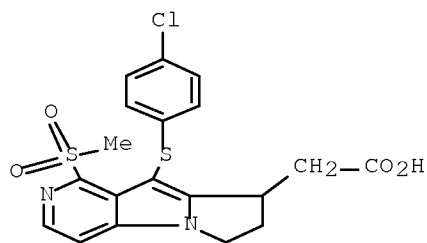
RN 688356-96-9 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(3,4-dichlorophenyl)thio]-  
 7,8-dihydro-1-(methylsulfonyl)- (CA INDEX NAME)



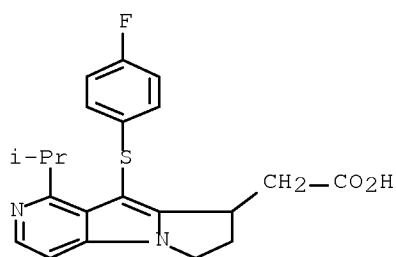
RN 688357-16-6 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(4-chlorophenyl)thio]-7,8-  
 dihydro-1-(methylsulfonyl)- (CA INDEX NAME)



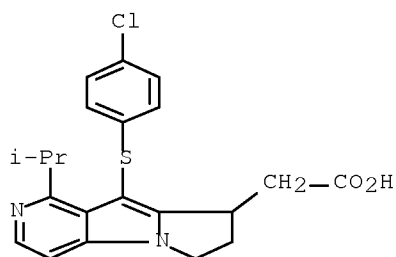
RN 688357-46-2 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(4-fluorophenyl)thio]-7,8-  
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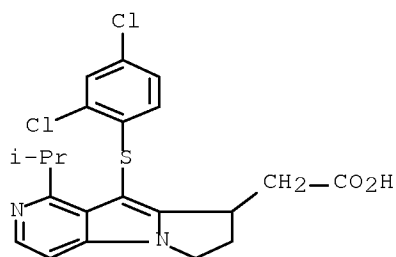
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CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(4-chlorophenyl)thio]-7,8-dihydro-1-(1-methylethyl)- (CA INDEX NAME)



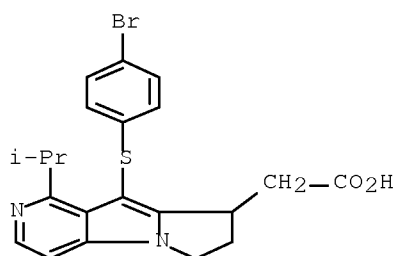
RN 688357-49-5 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(2,4-dichlorophenyl)thio]-7,8-dihydro-1-(1-methylethyl)- (CA INDEX NAME)



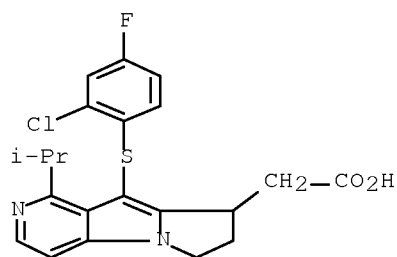
RN 688357-50-8 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(4-bromophenyl)thio]-7,8-dihydro-1-(1-methylethyl)- (CA INDEX NAME)



RN 688357-51-9 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(2-chloro-4-fluorophenyl)thio]-7,8-dihydro-1-(1-methylethyl)- (CA INDEX NAME)



RN 688357-69-9 CAPLUS

CN 6H-Pyrido[3,4-b]pyrrolizine-8-acetic acid, 9-[(4-chlorophenyl)thio]-7,8-dihydro-1-(1-methoxypropyl)- (CA INDEX NAME)

